

ABSTRACT OF THE DISCLOSURE

An apparatus for estimating power consumption includes an behavioral synthesizing unit and a clock-based simulation unit. The behavioral synthesizing unit is provided with an algorithm-level
5 description as an input and converts the algorithm-level description to a clock-based description and behavioral synthesis information. The clock-based description and behavioral synthesis information are input to the clock-based simulation unit, which proceeds to execute a clock-based simulation and calculates a power consumption factor of a storage
10 element based upon both the clock-based description and behavioral synthesis information.